

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listing, of claims in the application:

Listing of Claims:

1. (Currently amended) An excipient for a metal chelate contrast agent, wherein said metal chelate contrast agent, M(L), comprises a metal ion M complexed with an organic ligand L, ~~which said~~ excipient ~~has~~ having the formula

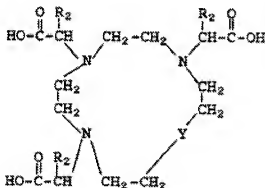


wherein X and X' are ~~each independently selected from calcium or zinc~~, L' is an organic ligand which may be L or another organic ligand which has a greater affinity for M than for calcium or zinc, and wherein ~~m and n are each independently 1, 2 or 3~~ m is 1 and n is 2.

2. (Canceled)

3. (Original) The excipient of claim 1 wherein L and L' are independently selected from linear and macrocyclic polyaminopolycarboxylic acids and derivatives thereof.

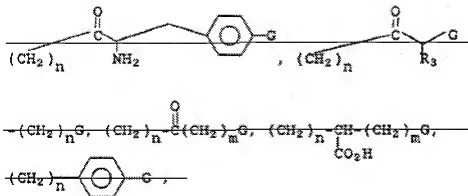
4. (Currently amended) The excipient of claim 1 wherein L and L' are independently selected from compounds of the formula



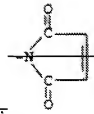
wherein

Y is oxygen or $\text{-N}^{\text{R}_1}\text{-}$;

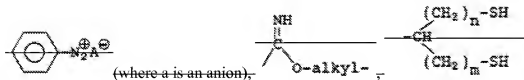
R₁ is hydroxypropyl and R₂ is methyl, are each independently hydrogen, alkyl, arylalkyl, aryl, alkoxy, hydroxyalkyl, hydroxyalkoxy,



wherein G is NH_2 , NCS , $\text{-N-C(=O)-CH}_2\text{-X}$, CO_2H , NHR_4 , $\text{N(R}_4\text{)}_2$, CN ,



wherein R₄ is alkyl or hydroxyalkyl, hydroxyalkoxy,



wherein n and m are zero or an integer from one to five, R₄ is hydrogen, hydroxyalkyl, alkoxy, alkyl, aryl, arylalkyl or hydroxyalkoxy and X is chloro, bromo or iodo.

5-6 (Canceled)

7. (Original) The excipient of claim 1 wherein L and L' are independently selected from 1,4,7,10-tetra-azacyclododecane-1,4,7-triacetic acid, 1,4,7-tris-(carboxymethyl)-10-(2'-hydroxypropyl)-1,4,7,10-tetraazacyclododecane, N,N-bis[2-[bis(carboxymethyl)-amino]ethyl]glycine, DTPA-bis methylamide, DTPA bis morpholinoamide and DTPA bis 1,2-dihydroxypropylamide.

8. (Original) The excipient of claim 1 wherein L and L' are the same organic ligand.

9. (Currently amended) A contrast agent composition for use in magnetic resonance, x-ray, ultrasound and radio-diagnostic imaging comprising
a metal ion, M, complexed with an organic ligand, L;
a complex salt excipient of the formula



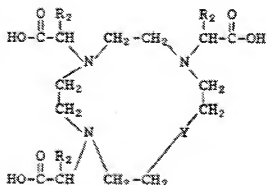
wherein X and X' are ~~each independently selected from calcium or zinc~~, L' is an organic ligand which may be L or another organic ligand which has a greater affinity for M than for calcium or zinc, and wherein m is 1 and n is 2 ~~are each independently 1, 2 or 3~~; and,

a pharmaceutically acceptable carrier therefor.

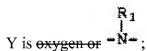
10. (Canceled)

11. (Original) The composition of claim 9 wherein L and L' are independently selected from linear and macrocyclic polyaminopolycarboxylic acids and derivatives thereof.

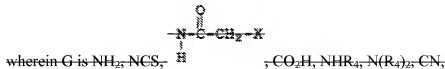
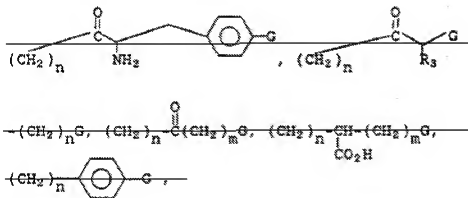
12. (Currently amended) The composition of claim 9 wherein L and L' are independently selected from compounds of the formula



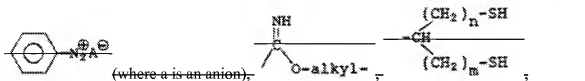
wherein



R_1 is hydroxypropyl and R_2 is methyl, are each independently hydrogen, alkyl, arylalkyl, aryl, alkoxy, hydroxyalkyl, hydroxyalkoxy,



wherein R₄ is alkyl or hydroxylalkyl, hydroxylalkoxy,



wherein n and m are zero or an integer from one to five, R₂ is hydrogen, hydroxylalkyl, alkoxy, alkyl, aryl, arylalkyl or hydroxyalkoxy and X is chloro, bromo or iodo.

13-14 (Canceled)

15. (Original) The composition of claim 9 wherein L and L' are independently selected from 1, 4, 7, 10-tetraazacyclododecane-1,4,7-triacetic acid, 1,4,7-tris(carboxymethyl)-10-(2'-hydroxypropyl)-1,4,7,10-tetraazacyclododecane, N,N-bis[2-[bis(carboxymethyl)-amino]ethyl]glycine, DTPA bis methylamide, 1,4,7,10-tetraazacyclododecane-1,4,7,10-tetraacetic acid, DTPA bis morpholinoamide and DTPA bis 1,2-dihydroxypropylamide.

16. (Original) The composition of claim 9 wherein L and L' are the same organic ligand.

17. (Original) The composition of claim 9 wherein the mole ratio of said complex salt to said metal chelate contrast agent is between about 0.05 and 10 percent.

18. (Original) The composition of claim 9 wherein said metal ion is selected from paramagnetic metal atoms, lanthanide series elements, yttrium, and the transition series elements.

19. (Original) The composition of claim 18 wherein said paramagnetic metals are selected from gadolinium(III), dysprosium(III), manganese(II), manganese(III), chromium(III), iron(II) and iron(III).

20. (Original) The composition of claim 9 wherein said metal ion complexed with an organic ligand is gadolinium(III) 1,4,7-tris(carboxymethyl)-10-(2'-hydroxypropyl)-1,4,7,10-tetraazacyclododecane and said excipient is calcium bis[1,4,7-tris(carboxy-methyl)-10-(2'-hydroxypropyl)-1,4,7,10-tetraazacyclododecanatocalcium(II)].

21-46 (Canceled)